

## Ellis County

### Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors

6/26/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 20 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Ellis County economy.<sup>1</sup>

These 20 sectors have a total direct output of approximately **\$87.8 million** and support **936 jobs** in Ellis County. Running the model for all 20 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Ellis County Economy					
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>
Direct Effect	936.0	3.61%	\$23,486,234	1.60%	\$87,759,221
Indirect Effect	124.3	0.48%	\$8,607,194	0.59%	\$18,480,821
Induced Effect	154.0	0.59%	\$8,962,615	0.61%	\$18,205,722
<b>Total Effect</b>	<b>1214.3</b>	<b>4.68%</b>	<b>\$41,056,043</b>	<b>2.79%</b>	<b>\$124,445,764</b>

As shown in the above table, agriculture, food, and food processing sectors support **1,214 jobs**, or **4.68%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 20 agriculture, food, and food processing sectors is approximately **\$41.1 million**, or **2.79% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **430 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Ellis County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	429.6	\$31,950,181
Landscape and horticultural services	119.6	\$5,348,681
Grain farming	98.5	\$22,648,540
All other crop farming	84.8	\$4,132,654
Support activities for agriculture and forestry	72.4	\$3,631,482
Veterinary services	56.5	\$5,382,438
Bread and bakery product, except frozen, manufacturing	26.1	\$2,985,424
Wholesale trade	25.7	\$5,259,844
Real estate	24.8	\$2,630,733
Truck transportation	20.3	\$2,339,258

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$32.0 million** to the Ellis County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	429.6	\$31,950,181
Grain farming	98.5	\$22,648,540
Veterinary services	56.5	\$5,382,438
Landscape and horticultural services	119.6	\$5,348,681
Wholesale trade	25.7	\$5,259,844
All other crop farming	84.8	\$4,132,654
Support activities for agriculture and forestry	72.4	\$3,631,482
Dairy cattle and milk production	13.8	\$3,062,465
Bread and bakery product, except frozen, manufacturing	26.1	\$2,985,424
Real estate	24.8	\$2,630,733

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Ellis County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	1.0	\$658,587.87
Grain farming	98.5	\$22,648,540.50
Fruit farming	0.4	\$19,484.86
Greenhouse, nursery, and floriculture production	4.4	\$337,561.13
All other crop farming	84.8	\$4,132,654.19
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	429.6	\$31,950,180.05
Dairy cattle and milk production	13.8	\$3,062,465.43
Poultry and egg production	0.9	\$426,454.81
Animal production, except cattle and poultry and eggs	6.5	\$482,589.07
Commercial logging	2.1	\$54,144.98
Commercial hunting and trapping	6.1	\$47,925.36
Support activities for agriculture and forestry	72.4	\$3,631,481.65
Fluid milk manufacturing	2.3	\$1,543,195.61
Animal, except poultry, slaughtering	3.7	\$2,329,452.51
Bread and bakery product, except frozen, manufacturing	26.1	\$2,985,423.80
Frozen cakes and other pastries manufacturing	1.4	\$215,883.31
Other snack food manufacturing	3.2	\$1,421,155.10
Breweries	2.5	\$1,080,920.82
Veterinary services	56.5	\$5,382,438.18
Landscape and horticultural services	119.6	\$5,348,680.97

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Ellis County, the retail sector was omitted.